

# INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/AU2004/001476**

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. <sup>7</sup>: H04K 1/00, G01B 9/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI: keywords [(1) interferomet+; quantum; beamsplit+, split+, divid+, coupl+, waveplate?; (2) interferomet+, beamsplit+, split+, divid+, frequenc+; qubit?]

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2003/019283 A2 (UT-BATTELLE LLC) 6 March 2003 1 <sup>st</sup> & 2 <sup>nd</sup> paragraphs at page 9, "Quantum Channel For The Transmission of Information" (pages 26-32), figures 1, 8, 9	1, 3-8
X	US 6430345 B1 (DULTZ <i>et al.</i> ) 6 August 2002 The whole document	1, 3-8
A	US 2003/0169880 A1 (NAMBU <i>et al.</i> ) 11 September 2003 The whole document	1-10
A	US 2002/0140941 A1 (PEDIGO) 3 October 2002 The whole document	1-10

☐ Further documents are listed in the continuation of Box C ☒ See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
**4 January 2005**

Date of mailing of the international search report  
**12 JAN 2005**

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This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member	
WO 03019283	US 6678054	US 2003098979	US 2003098980
	WO 03019282	WO 03019284	
US 6430345	CA 2297892	DE 19823849	EP 1055308
	WO 9962220		
US 2003169880	JP 2003249928		
US 2002140941			
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.			
END OF ANNEX			